TCF submission to Te Waihanga on the draft National Infrastructure Plan

6 August 2025

A: Introduction

1. Thank you for the opportunity to comment on the draft National Infrastructure Plan (the draft Plan). This feedback is provided on behalf of the New Zealand Telecommunications Forum (TCF).

2. The TCF is the telecommunications sector's industry body which plays a vital role in bringing together the telecommunications industry and key stakeholders to resolve regulatory, technical and policy issues for the benefit of the sector and consumers. TCF member companies represent 95 percent of New Zealand telecommunications customers. Our members include network operators, retail service providers and the tower companies that own and operate cell towers.

3. We think Te Waihanga has done a good job identifying the challenges facing infrastructure in Aotearoa New Zealand, and support most of the recommendations in the draft Plan.

4. Our comments focus on:

    a. The commentary on telecommunications: we query some of the data (in 7.5) and provide updated information and context.

    b. Regulatory issues: we support the recommendations (in 4.4 and 4.5) on providing an enabling environment for infrastructure in the resource management system and welcome further engagement on how to involve telecommunications (and other infrastructure) in spatial planning. We also support the points made (in 4.5) about the need for policy stability and the costs of regulation being proportionate.

    c. The distinction between network infrastructure and social infrastructure (in 4.3): we recommend including more emphasis on the equity and other socially beneficial outcomes that flow from sector and government coinvestment in the section on fit for purpose funding tools.

d. Thinking about public and private sector: ensuring that privately owned infrastructure, providing public benefit, is adequately considered in the Plan. This is important if the Plan is going to have a role in influencing spatial planning and government investment.

B: Commentary on telecommunications (7.5)

5. The draft Plan provides an overview of telecommunications in part 7.5, and mentions the sector in other parts of the report concerning funding frameworks and levels of investment. There are some areas that need clarification, more context or stronger signalling. We are keen to engage further with Te Wahanga on the telco sector summary.

Telecommunications infrastructure makes a significant contribution to community and economic outcomes (proposed new section to be included in 7.5))

6. We welcome the recognition of telecommunications as critical infrastructure in the draft Plan, but think it misses an opportunity to highlight the significant contribution telecommunications makes to community and economic outcomes. We suggest this context be added to 7.5.

7. Telecommunications services have become indispensable, touching nearly every aspect of our lives. For people in the community, telecommunications is needed to connect socially and in emergencies, access government services, and bank and shop online etc.

8. As an enabler of economic growth telecommunications increases productivity (including through the use of AI tools), enables payment systems, supports collaboration and innovation, enhances market reach and facilitates global trade across all sectors of the economy. The telecommunications sector is making significant investments that support the digital economy. These investments are not just in connectivity and network enhancements, but also in data centres.

9. We also ask that telecommunications be mentioned alongside other critical infrastructure in the first paragraph of the executive summary on page four of the draft Plan.

Paying for investment (7.5.2)

10. See comments below concerning recommended key issues and opportunities and under funding tools.

Current state of the network (7.5.5)

11. We appreciated the opportunity to meet with Te Waihanga and ask questions about the data used to help write the commentary on the current state of the network. We think there are areas where Te Waihanga may have misunderstood New Zealand's deployment relative to other countries, or missed some useful information or benchmarking tools. These include:

    a. In terms of mobile network coverage:

        i. Part 7.5.5 says only 14 percent of the population is covered by 5G mobile networks, noting this is nearly the lowest in the OECD and well below other comparator countries. This figure underestimates the extent of 5G deployment in New Zealand. The Commerce Commission's latest Telecommunications Monitoring Report[1] (which may not have been out

[1] See snapshot on page 12.

when Te Waihanga wrote the draft Plan) notes that as of 2024 5G reached 40 percent of the population. We acknowledge that government delays in allocating spectrum, relative to comparator countries, have delayed the rollout of 5G in New Zealand.

ii. Contrary to the conclusion in the draft Plan, New Zealand 4G coverage benchmarks well to comparator economies overall. Differences between New Zealand and other counties are within estimation error as countries provide their own estimates, using operator coverage estimates which in turn are a product of the parameters in the model. Further, mobile network operators (MNOs) have been deploying new 4G cell sites and reconfiguring networks in anticipation of 3G shutdown, and this will further boost 4G reported coverage.

iii. In the GSMA Mobile Connectivity Index New Zealand's scores are fairly similar to comparator countries, with only a few percentage points difference here and there. As noted above, with MNOs estimating their coverage and reports to the International Telecommunications Union (ITU), the percentage differences are in the realm of margins of error. On the speed side, the percentage differences are so small they would be insignificant in terms of user experiences. And average speed is not considered to be a good proxy for user experience[2]. We think the comparisons in the draft Plan on mobile connectivity do not provide very meaningful information, and over emphasise the "behind" message on 4G coverage and speeds.

GSMA Mobile connectivity Index

	NZ Rank	NZ	Colombia	Cost Rica	Chile	Canada	Finland	Sweden	Iceland	Norway	OECD Avg
Index	5th	**89.5**	72.2	73	79.7	88.3	91.5	90.3	91.4	92	87.03243
Infrastructure	6th	89.4	68	63.3	79.8	92.9	96.6	94.5	92.8	96.6	89.62432
Affordability	1st	89.1	64.2	64.7	72.1	88.7	85.3	81.3	86	86.3	83.13243
Consumer Readiness	4th	92.1	83.2	89.1	88.3	81.8	95.3	95.1	95.1	95.3	90.39459
Content and Services	5th	87.7	74.9	78	79.4	90	89.1	91	92.2	90.3	85.88919

iv. The Open Signal Report on Mobile experience in APAC. This report compares 18 major cities in APAC countries in 2024. New Zealand comes in at no.11 on best 5G availability, has the fourth fastest 5G upload speed, and second fastest 5G upload speed.

b. Average monthly data usage per connection has increased exponentially. The Chorus Q4 FY25 Connections Update shows that fibre usage has increased from 44GB in 2014 to 670GB today[3].

[2] https://www.ericsson.com/en/blog/2022/1/who-cares-about-peak-download-speeds-in-5g

[3] https://assets.ctfassets.net/7urik9yedtqc/7CX3EHrHpsiftuUux1dkok/19a917f066ee91faf05b0430e7f4c2f1/chorus-investor-day-2024-presentation.pdf

c. New Zealand's fibre network reaches 87 percent of the population. We are 10th in the OECD for fibre uptake. Fibre accounts for approximately 70 percent of all fixed broadband connections[4].

d. New Zealand is among the highest adopters of fixed wireless in the OECD[5], with fixed wireless accounting for approximately 20 percent of all fixed broadband subscriptions.

e. As the migration to 5G technology increases and existing networks are phased out, mobile network operators anticipate that 3500 to 4000 new mobile towers will be needed over the next ten years. The new model is for towers to be built and owned by tower companies. Connexa already has 800 new mobile tower sites in its forward-build programme.

Current investment intentions (7.5.7)

12. The information (in 7.5.7) compares the estimates of investment intentions in the Pipeline to those from the Commerce Commission. We suggest this section more clearly explain that the Pipeline does not accurately reflect investment intentions in the telecommunications sector, with only a few telcos contributing information on some of their planned projects.

13. It can be difficult for telcos to contribute to the Pipeline where investment isn't planned in project terms. For telecommunications the pipeline of investment may be more generic, in areas like network capacity, coverage augmentation and ongoing system enhancements. These will be forecast and planned as part of a process but will not be a specific multi-year project as you might see for a new road or electricity generation project. While there may be many small projects that make up a network upgrade - such as each new cell site or fibre deployment - it would be administratively difficult to load these into the pipeline, and this may not align with the long-term project nature of the pipeline.

14. We acknowledge it would be helpful for Te Waihanga to have a clearer view on telco sector investment intentions. The TCF could facilitate a workshop to find a solution. For example, an alternative could be to develop a sector forecast based on Commerce Commission reported investment and market announcements (for example, about the percentage of revenue a company intends to invest).

---

4 https://comcom.govt.nz/__data/assets/pdf_file/0025/367054/Telecommunications-Monitoring-Report-30-June-2025.pdf, page 54.

5 https://www.oecd.org/en/data/insights/statistical-releases/2025/05/fibre-and-5g-continue-to-expand-their-footprint-while-fixed-wireless-access-gains-ground-in-oecd-countries.html

Key issues and opportunities (7.5.8)

Resolving for rural customer expectations

15. Te Waihanga rightly identifies rural telecommunications access as a key issue and opportunity. We offer some further context and recommendations to better describe the rural connectivity challenge.

    a. The draft plan should emphasise the urgency of addressing the rural digital divide, by more clearly describing the underlying issue. Rural communities lack access to the high-capacity connectivity infrastructure available in urban areas. As connectivity becomes increasingly essential for economic and social participation, the divide will continue to grow unless proactively addressed.

    b. As already noted in the draft Plan, a mix of technologies will be needed to solve the rural connectivity problem. The TCF recommends framing the challenge in a more technology neutral way.

    c. Significant investment is going into rural networks, with new mobile towers, fibre routes and satellite coverage. Satellite direct to mobile service will be transformative for many communities. But this investment can only go so far because of economic challenges. We discuss these further later in the submission in the section on funding tools.

    d. We need to align expectations across government, rural communities and the telecommunications sector on how to meet rural end user expectations for performance and resilience. And think about how to address the gap between what makes sense to invest economically and those expectations.

    e. Once the conversation about expectations has taken place the Government has a role to play in developing strategy on how to meet rural connectivity needs. The goals of the strategy should be technology-neutral and outcome-focused, with solutions evaluated based on their ability to deliver equitable, high-quality connectivity to rural communities (now and into the future).

    f. The draft Plan references the eventual withdrawal of the rural copper network, which may inadvertently suggest this process is contributing to the digital divide. We ask that any such inference be removed. Commerce Commission data shows that approximately 97 percent of premises outside the copper footprint have access to at least three alternative services, and nearly 100 percent have access to two.

Over investment and resilience

16. Another issue the Plan could canvas is the Te Waihanga finding that the telecommunications sector is investing significantly more than comparator countries. The draft Plan suggests these investment levels are not a concern where they reflect customer demand. But investing outside sector norms, including to meet customer or government expectations for

additional resiliency, is not sustainable where customers do not want to pay higher prices. We discuss this further in the section on funding tools.

Competition

17. The key issues section, under the bullet point on governance and regulation, suggests there are potential gaps related to competition in the sector. We note there are high levels of competition in the New Zealand telco sector with over 100 internet service providers (ISPs), three strong mobile network operators (MNOs) and a growing mobile virtual network operator (MVNO) market. By comparison the UK also has three MNOs but for a market of over 70 million people.

C: Fit for purpose pricing fund funding tools (4.3)

18. The draft Plan rightly points out that telecommunications infrastructure is largely customer-funded. It distinguishes (in 4.3) between network infrastructure and social infrastructure, concluding that network infrastructure usually has opportunities to fund itself by charging people who use the infrastructure, with funding from general taxes needed to guarantee consistent and equitable access to social infrastructure.

19. To future proof the Plan, we think it needs to more strongly signal the equity and other socially beneficial outcomes that come from sector and government co-investment in telecommunications networks. Section 7.5.2 references the co-investment in UFB but doesn't talk about the reasons for this and the benefits achieved.

20. The Te Waihanga State of Play report on the telco sector highlights the challenging industry economics at play. It notes (at page 33) that in a sector where the private market funds the majority of infrastructure, providing services to rural communities is economically challenging. Without Government participation, remote areas are unlikely to attract private infrastructure investment. The State of Play report goes on to acknowledge (on page 36) that a reasonable return on capital should be expected if investors are to take on the risks of building new infrastructure. We agree with these findings.

21. The telco sector cannot, on its own, fund non-economic initiatives, such as extending connectivity to remote regions, gold standard levels of resilience and addressing digital equity challenges. While investments (in new technologies and to meet increased demand for data) are increasing, revenues are decreasing[6]. Consumers are getting more for less, with data usage growing exponentially while prices remain low despite exponential investment.

22. Extending coverage to sparsely populated areas is economically challenging because costs increase where greater land areas need to be covered. Consumers are generally not prepared to pay for this but do expect continuous and high quality connectivity wherever they are. Without it digital equity issues also arise, limiting access to everyday services and the benefits of the digital economy.

23. New Zealand telecommunications companies have a strong record of working well with government in public-private partnerships to deliver communication services in non-economically viable areas. Economic studies show the benefits this connectivity brings. Future partnerships may be needed to reach more remote locations, upgrade services in some areas and provide gold plating for resilience if that is an outcome the government of the day expects.

24. We recommend these issues be canvassed in parts 4.3 and 7.5.2 of the draft Plan, as an example of an exception to the general principle that network infrastructure can pay for itself. In recommendation six on funding pathways (on page 71), we suggest that the word "usually" is added before "network infrastructure".

---

6 https://comcom.govt.nz/__data/assets/pdf_file/0025/367054/Telecommunications-Monitoring-Report-30-June-2025.pdf

D: Coordination tools (4.4)

25. The TCF agrees that coordination between sectors can ensure services are built and operated in a cost-effective way, and supports the recommendations to improve coordination mechanisms.

Infrastructure corridors

26. The example of "road corridors" is given on page 72, noting these corridors often carry water, energy and telecommunications networks. Our members can find it extremely difficult to get access to these corridors, especially when protected by designations. An infamous example is the opening of Transmission Gully without the opportunity to place telecommunications infrastructure in the road, resulting in mobile coverage blackspots and safety issues for motorists. To address this issue we think the new resource management legislation needs to provide for shared "infrastructure corridors".

27. We ask that Te Wahanga lead the way by talking about infrastructure corridors rather than road corridors, signal the need for infrastructure corridors in 4.4.1, and advocate for infrastructure corridors in its conversations with the Government about Resource Management Bill Three.

Coordinated infrastructure provision and land-use planning

28. We also agree that coordination between infrastructure provision and land-use planning is essential. At the moment there are no requirements for developers, or councils approving housing developments, to engage with telcos before a development is built. Without this it makes it difficult to ensure residents have a choice of connectivity options. Retrospectively providing networks requires roads to be dug up at additional expense, and results in sub-optimal placement of infrastructure (such as having towers and cabinets in front of houses after people have purchased them).

29. Out of cycle plan changes are also a problem for our sector, making it difficult to provision supporting telecommunications infrastructure.

30. We ask that the draft Plan signal the need to address these issues, along with the other resource management related recommendations. More specifically we ask that the draft plan recommend, at 4.4.1, a requirement to develop national direction and planning standards similar to Australia's *Telecommunications in new developments policy 2024*. The spatial planning recommendation will not be sufficient to address the issue.

Spatial planning

31. The TCF supports recommendation seven to require spatial planning under the new resource management system.

32. Spatial planning is an essential tool for the telecommunications industry as it provides information on where growth is expected, which enables the sector to do network planning. However, existing spatial plans which are non-statutory fail to recognise telecommunications as infrastructure needed to support a well-functioning urban environment, growth, housing

and business development. The Future Development Strategies and Implementation Plans under the National Policy Statement on Urban Development 2020 are useful but generally fail to recognise small footprint but critical infrastructure such as telecommunications and electricity distribution networks. What we need is a mechanism for privately owned infrastructure to input into the spatial planning process.

33. We see value in the National Infrastructure Plan informing the spatial planning process at the national and regional level. But if this is to happen, it's important that the Plan:

    a. Adequately signals the needs and opportunities for private as well as public infrastructure.

    b. Promotes both large and small footprint infrastructure. The draft plan focuses on large footprint critical infrastructure as these are easier to visually identify. In our increasingly digital world all spatial plans and combined plans can be developed and presented digitally. This should enable, subject to commercial confidentiality, all networks to be shown whether large or small footprint.

    c. Notes the need for infrastructure to be represented spatially and in words describing the need for and critical nature of telecommunications and other networks to New Zealand and throughout the regions.

    d. Recommends investment in data about the natural environment and hazards to support spatial planning. This will provide a solid foundation for making informed decisions and managing risks effectively. We support the reference to data in the section on institutional strengthening.

    e. Promotes the inclusion of infrastructure corridors in spatial plans, as integrated spaces for multiple networks. As noted earlier in our submission, roads and state highways are infrastructure corridors, not solely places for transport. It should be assumed that wherever a road is shown on a spatial plan it is an infrastructure corridor that will also accommodate telecommunications and electricity.

    f. Recommends the creation of a national spatial plan (or similar) that sits over or informs the regional spatial plans.

E: Ensuring a predictable policy environment (4.5)

34. We agree with Te Waihanga's analysis of the need for a predictable policy environment.

Resource management issues

35. On the resource management side we support recommendation nine to create a more enabling environment for infrastructure in the resource management system.

36. While telecommunications infrastructure is on the smaller side we still need that clear pathway through the consenting system. On average, a routine consenting process is around $100 000 per site, and this adds up when building and replacing network all over the country. We are hoping that the proposed changes to the National Environmental Standards for Telecommunications Facilities (NESTF) will save the sector $60 million in unnecessary consenting and related costs over the next ten years. But even with the proposed NESTF 2025 amendments we still need the consenting pathway, a National Policy Statement for Infrastructure, and national planning standards.

37. The proposed RMA reform legislation risks enabling infrastructure under the Planning Act with overly restrictive provisions under the Natural Environments Act. The provision of national direction that sits across both Acts is needed to enable infrastructure. Greater national consistency means certainty and consequently less cost and the ability to build more infrastructure faster.

38. Our Local Government Working Party was pleased to see commentary on institutional strengthening and building capability in the resource management system. The suggestions to have an entity with clear accountability to develop and maintain national infrastructure standards, investment in data about the natural environment and hazards to support planning, and guidance to support planning practice are very welcome. Our experience is that council planners often take a 'we know best' approach to the location of our networks even when they are permitted activities, and don't have knowledge or experience of telecommunications infrastructure. The recommendations around capability building could help with this.

Policy stability and predictability (and recommendation 10)

39. All infrastructure sectors need policy stability, but recommendation 10 only refers to energy investors. While we appreciate there are specific challenges for energy concerning renewables and decarbonisation, we recommend that recommendation also refers to infrastructure more generally.

Costs and benefits of regulation

40. We support the general principle, referenced at page 77 of the draft Plan, that the costs of regulation should be proportionate to the benefits they achieve.

41. While regulators usually exercise their powers in accordance with good regulatory practice, we have experienced instances where powers are exercised without sufficient work on problem definition, evidence of impacts, options and cost benefit analysis. There can be a

tendency to add new requirements without evaluating the impact of existing ones or considering cumulative burden.

42. Our sector also deals with out of date telecommunications regulation that hasn't kept up to date with changes in the market and technology. This stifles innovation and limits the ability to provide essential services to New Zealand, because investment has to be made in legacy technology.

43. If you have any questions about this submission please contact kim.connolly-stone@tcf.org.nz in the first instance.

[ends]